

### **THE OFFICE ACTION**

In the final Office Action issued on December 29, 2006, the Examiner rejected **claims 1-13** under 35 U.S.C. §112, second paragraph, as being indefinite.

The Examiner rejected **claims 27-33, 38 and 39** under 35 U.S.C. §102(b) as being anticipated by WO 01/89001 to Srivastava et al. ("Srivastava"). The Examiner also rejected **claims 27-29, 31-34 and 38-39** as being anticipated by WO 02/11214 to Bokor ("Bokor"). The Examiner also rejected **claims 14-16, 18-21, 25 and 26** under 35 U.S.C. §103(a) as being unpatentable over Bokor in view of U.S. Published Patent Application Publication No. 2004/0051444 to SchaePKens et al. ("SchaePKens") and either 2002/0174794 to Lowden et al. ("Lowden") or EP0087745 to Wyner et al. ("Wyner"). The Examiner also rejected **claims 1-7, 12, 13, 14-20, 25-26, 40, 43 and 45** under 35 U.S.C. §103(a) as being unpatentable over Srivastava in view of SchaePKens and either Lowden or Wyner. **Claim 44** was rejected based on Srivastava in view of Applicants' admission. The Examiner indicated that **claims 9-11, 22-24, 35-37 and 41-42** contained allowable subject matter.

**Claims 1-34, 37-43, and 45-46** are pending in the application.

### **REMARKS**

Amendments have been made to the claims to address the Examiner's objections/rejections to these. In light of these amendments and the following comments, Applicants respectfully request withdrawal of all rejections.

#### **A. The Claims Satisfy §112**

The Examiner rejected claims 1-13 under §112, second paragraph as being indefinite. Specifically, the Examiner objected to the wording "and/or" in claim 1. Applicants have made an amendment to reword the claim to satisfy §112. Applicants request withdrawal of this rejection.

#### **B. The Claims are Not Anticipated by Srivastava or Bokor**

The Examiner rejected claims 27-33, 38 and 39 as being anticipated by Srivastava. Likewise, the Examiner rejected claims 27-29, 31-34 and 38-39 as being anticipated by Bokor. Applicants respectfully traverse.

As amended, claim 27 now recites that the phosphor composition includes at

least one of  $(\text{Sr}_{0.95}\text{Ba}_{0.025}\text{Eu}_{0.025})_2\text{SiO}_4$  or  $(\text{Sr}_{0.58}\text{Ca}_{0.36}\text{Eu}_{0.06})_2\text{SiO}_4$ . This incorporates the recitation of previous claims 35 and 36, which the Examiner had indicated were allowable. Thus, Applicants request withdrawal of this rejection and allowance of claim 27 and those dependent therefrom.

**C. The Claims are Patentable Over Srivastava in view of Schaepkens and either Lowden or Wyner**

The Examiner rejected claims 1-7, 12, 13, 14-20, 25-26, 40, 43 and 45 as being unpatentable over Srivastava in view of Schaepkens and either Lowden or Wyner. Applicants respectfully traverse.

The Examiner admits that Srivastava does not teach a phosphor composition including one or more garnet phosphors and a magnesium fluorogermanate. The Examiner states that it would have been obvious to include such phosphors in view of Schaepkens, who "in a patent application on lighting apparatus (see title and abstract) including color conversion of primary light from light emitting apparatus...hence analogous art, teach the inclusion of both a garnet phosphor having the general formula as claimed...and a magnesium fluorogermanate...Motivation to include both...phosphors immediately derives from the suitability of said phosphors for conversion of UV light to produce compents in the spectrum."

Applicants submit that the proposed combination of Srivastava with Schaepkens is improper for at least the following reasons. First, despite the Examiner's assertion to the contrary, Schaepkens is NOT directed to a lighting apparatus for providing illumination, as Srivastava and the present invention are. Rather, as can be clearly seen from even a cursory examination of Schaepkens, it is directed to electroluminescent ("EL") displays and devices. That is, Srivastava and the present invention are directed to white light LED devices including an LED chip and a phosphor material positioned around the chip, most often suspended in a transparent encapsulant. The LED chip emits light as a result of electronic excitation. This light is partially or fully absorbed by the phosphor material, which emits light of a different wavelength. The LED devices are useful in general illumination applications for replacement of other light sources, such as incandescent lamps.

Schaepkens on the other hand, is directed to a completely different device, an

EL display device. These devices are constructed completely differently, and produce light according to different processes than the LED devices of Srivastava. The EL displays of Shaepkens include successive layers of a substrate, an anode, an organic EL, and a cathode. Light is produced by the organic layer by passing a voltage from the anode to the cathode, by the injection of holes and electrons into the substrate. The anode is generally transparent to allow transmission of the light. (see generally paragraphs 0026-0028). The EL devices are not general illumination devices as can be found in Srivastava.

Thus, despite the Examiner's assertions, this is NOT analogous art to the LED devices of Srivastava. It is true that Shaepkens discloses that phosphors can be used in the EL devices. However, this does not indicate that the art is analogous. That is, phosphors suitable for use in EL devices are not necessarily suitable for use in LED based lighting devices, and vice versa. This is due to a number of factors, including phosphor efficiency, saturation effects, and intensity of the produced light. The Examiner attempted assertion that the disclosure of the claimed phosphors in Shaepkens would make it obvious to use such phosphors in the device of Srivastava is improper and incorrect.

As the Examiner will appreciate, the combination of elements from non analogous sources, in a manner that reconstructs the applicant's invention only with the benefit of hindsight, is insufficient to present a prima facie case of obviousness. *In re Oetiker*, 24 USPQ2d 1443 (Fed. Cir. 1992). While it might possibly be said that both Srivastava and Shaepkens disclose phosphor compositions, they are far too remote to be considered analogous prior art. It cannot fairly be said that one skilled in the art to which Srivastava pertains (LED devices for general illumination) would reasonably be expected search the technical fields to which Shaepkens belongs (EL displays), nor would one be motivated to combine the teachings of Shaepkens with Srivastava, as there is no indication that the phosphors disclosed in Shaepkens would be suitable for use in Srivastava. Thus, even assuming that all of the limitations of the present claims can be found by culling from the prior art parameters to fit the claimed invention, it is improper to pick and choose individual elements from assorted prior art references to recreate the claimed invention without some motivation to do so. *Symbol Technologies, Inc. v. Opticon, Inc.*, 19 USPQ2d 1241 (Fed. Cir. 1991). As is well accepted, if a cited reference "is not analogous art, it has no bearing on the obviousness of the patent claim." *Jurgens v. McKasy*, 18

USPQ2d 1031 (Fed. Cir. 1991).

Furthermore, there is no motivation to combine either Wyner or Lowden with either Srivastava or Shaepkens. Wyner is directed to a metal halide arc discharge lamp while Lowden is directed to impregnating a bullet with a luminescent substance. Neither is directed to an LED based lighting device or an EL display. The fact that these references disclose the recited phosphor as suitable for use in their application does not suggest or imply that they would be suitable for use in either of the devices of Srivastava or Shaepkens. Again, they are non-analogous art and one skilled in the art would not look to either reference.

Finally, the Examiner provides no reason why one would choose the use of magnesium fluorogermanate phosphor in Shaepkens for use in Srivastava among the other red phosphors disclosed in paragraph 0039 of Shaepkens. As the Examiner will appreciate, where the reference does not highlight the claimed compound among the many disclosed, anticipation does not result. *In re Kollman et al.*, 201 U.S.P.Q. 193 (CCPA 1979). Nor does anticipation result when one skilled in the art would have to choose judiciously from a series of possible combinations. *In re Sivaramakrishnan*, 213 U.S.P.Q. 441 (CCPA 1982). Similarly there can be no anticipation where compositions are disclosed in extremely broad terms, so that the likelihood of arriving at the claimed composition would be the same as discovering the combination of a safe by an inspection of its dials. *Ex parte Garvey*, 41 U.S.P.Q. 583 (POBA 1939).

For at least these reasons, withdrawal of this rejection is requested.

**D. The Claims are Patentable Over Bokor in view of either Schaepkens and either Lowden or Wyner**

The Examiner rejected claims 14-16, 18-21, 25 and 26 as being unpatentable over Bokor in view of Schaepkens and either Lowden or Wyner. Applicants respectfully traverse.

The reason that this proposed combination does not render the claims patentable is for the same reasons as outlined above with respect to Srivastava, Shaepkens, Lowden and Wyner. That is, Bokor, like Srivastava, is directed to LED devices for general illumination. The other references are directed to non-analogous subject matter and one skilled in the art would not seek to combine the teachings of the references, even assuming such a combination would be possible.

**F. The Claims are Patentable Over Srivastava in view of Applicants' Admission**

Claim 44 has been canceled. Withdrawal of this rejection is requested.

**CONCLUSION**

It is respectfully submitted that the subject application is now in better condition for allowance.

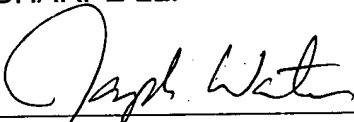
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Respectfully submitted,

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